

The area at risk from a release at site was evaluated using a trajectory and fates modeling analysis for potential RWCD spill volumes, which may result from oil transfer operations. A sensitivity analysis was performed on these results to evaluate possible seasonal environmental and weather impacts. This was performed using stochastic evaluation technique for trajectories over each seasonal period. The identified pessimistic conditions were used to develop trajectory plots depicting the projected areas of impact over a 72-hour period. These trajectories are based on specific type of products and have incorporated weathering and fates considerations for the oil.

The areas at risk of impact from the analysis have been compared to the sites identified in the latest edition of the Area Contingency Plan. California State representatives, USCG representatives, local city and county representatives, environmental groups, and industry representatives develop the ACP through a joint effort.

The sites considered through the ACP process include:

- water intakes
- lakes and streams
- fish and wildlife
- recreational areas
- endangered flora and fauna
- wetlands or other environmentally sensitive areas
- other areas of economic importance including sensitive terrestrial environments, aquatic environments, and unique habitats

Oil Spill Model

The analyses were completed using oil spill modeling software OILMAP for Windows V2.4 from Applied Science Associates (ASA). Several modeling modes within OILMAP were applied to the analysis. These modes were configured to address specific types of spill impact including assessment of different response scenarios on the spill fate, spill trajectory and weathering prediction, and statistical probabilities of shoreline impact of the spilled oil.

The oil spill trajectory analysis for support of the Offsite Consequence Analysis involved primarily the Trajectory, Fates, and Stochastic modes which are summarized below: